IN THE CLAIMS:

Please amend Claims 1-3, 6, 9-13, 17-20, as follows:

1. (Currently Amended) A heater drive circuit comprising:

current detecting means for detecting a value of a current across an AC power supply line that is supplied from an AC power supply;

full-wave rectifying means for full-wave-rectifying an AC voltage on the AC power supply line;

switching means for switching a supply of the full-wave-rectified voltage from said full-wave-rectifying means to said heater ~~at a high frequency~~;

voltage detecting means for detecting a voltage applied to a ~~heating~~ heater ~~that should~~ to be driven; and

heater control means for ON/OFF-controlling said switching means on the basis of the current value detected by said current detecting means and the voltage value detected by said voltage detecting means.

2. (Currently Amended) A heater drive circuit according to claim 1, further comprising filter means for removing a high frequency component contained in a switching output by said switching means,

wherein the full-wave-rectified voltage subjected to switching at the high frequency is applied to said ~~heating~~ heater through said filter means.

3. (Currently Amended) A heater drive circuit according to claim 1, wherein said voltage detecting means detects an average value or a peak value of the voltage applied to said ~~heating~~ heater.

4. (Original) A heater drive circuit according to claim 3, wherein said current detecting means is constructed of a current transformer interposed in series in the AC power supply line and a rectification circuit connected to an output winding of said current transformer.

5. (Original) A heater drive circuit according to claim 3, wherein said switching means includes a switching transistor and a current retaining diode connected to said switching transistor, and changes an ON/OFF duty of said switching transistor.

6. (Currently Amended) A heater drive circuit according to claim 5, wherein said heater control means gradually increases the ON/OFF duty when starting ~~the drive~~ an operation of said heater as set ON from OFF, and controls the ON/OFF duty so that the current value detected by said current detecting means is held to a predetermined value at a point of time when predetermined or longer time elapses since ~~the start~~ starting of ~~the~~ an operation.

7. (Original) A heater drive circuit according to claim 5, further comprising storage means for storing the voltage value detected by said voltage detecting means when controlling the ON/OFF duty of said switching means so that the current value detected by

said current detecting means comes to a predetermined value in a state where the voltage value on the AC power supply line is fixed to a predetermined value,

wherein said switching means, when a predetermined condition is met, controls the ON/OFF duty so that the voltage value detected by said voltage detecting means is equalized to the voltage value stored on said storage means or to a value corresponding to the voltage value.

8. (Original) A heater drive circuit according to claim 7, wherein the predetermined condition is a condition that said heater drive circuit be utilized by a user.

9. (Currently Amended) A heater drive circuit according to claim 1, wherein an image formed on an image bearing body is thermally fixed by said ~~heating~~ heater driven by said heater drive circuit.

10. (Currently Amended) An image forming apparatus including a fixing device comprising a heater drive circuit according to claim 9.

11. (Currently Amended) A heater drive circuit comprising:

a current detector for detecting a value of a current across an AC power supply line that is supplied from an AC power supply;

a full-wave rectifier for full-wave-rectifying an AC voltage on the AC power supply line;

a switching device for switching the full-wave-rectified voltage from said ~~full-wave-rectifying means~~ full-wave rectifier at a high frequency;

a voltage detector for detecting a voltage applied to a ~~heating~~ heater ~~that should~~ to be driven; and

a heater control unit for ON/OFF-controlling said switching device on the basis of the current value detected by said current detector and the voltage value detected by said voltage detector.

12. (Currently Amended) A heater drive circuit according to claim 11, further comprising a filter circuit for removing a high frequency component contained in a switching output by said switching device,

wherein the full-wave-rectified voltage subjected to switching at the high frequency is applied to said ~~heating~~ heater through said filter circuit.

13. (Currently Amended) A heater drive circuit according to claim 11, wherein said voltage detector detects any one of an average value and a peak value of the voltage applied to said ~~heating~~ heater.

14. (Original) A heater drive circuit according to claim 13, wherein said current detector is constructed of a current transformer interposed in series in the AC power supply line and a rectification circuit connected to an output winding of said current transformer.

15. (Original) A heater drive circuit according to claim 13, wherein said switching device includes a switching transistor and a current retaining diode connected to said switching transistor, and changes an ON/OFF duty of said switching transistor.

16. (Original) A heater drive circuit according to claim 15, wherein said heater control unit gradually increases the ON/OFF duty when starting the drive of said heater as set ON from OFF, and controls the ON/OFF duty so that the current value detected by said current detector is held to a predetermined value at a point of time when predetermined or longer time elapses since the start of the operation.

17. (Currently Amended) A heater drive circuit according to claim 15, further comprising a storage device for storing the voltage value detected by said voltage detector when controlling the ON/OFF duty of said switching ~~control means~~ device so that the current value detected by said current detector comes to a predetermined value in a state where the voltage value on the AC power supply line is fixed to a predetermined value,

wherein said switching device, when a predetermined condition is met, controls the ON/OFF duty so that the voltage value detected by said voltage detector is equalized to the voltage value stored on said storage device or to a value corresponding to the voltage value.

18. (Original) A heater drive circuit according to claim 17, wherein the predetermined condition is a condition that said heater drive circuit be utilized by a user.

19. (Currently Amended) A fixing device comprising:

[[a]] said heater drive circuit of ~~according to~~ claim 11; and

a ~~heating~~ heater driven by said heater drive circuit,

wherein an image formed on an image bearing body is thermally fixed by said heater drive circuit and said heating heater.

20. (Currently Amended) An image forming apparatus including [[a]] the fixing device ~~according to~~ of claim 19,

wherein an image formed on an image bearing body is thermally fixed by said fixing device.